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FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of )  
 )  
Allocation of Spectrum Below ) ET Docket No. 94-32  
5 GHz Transferred from )  
Federal Government Use )

To: The Commission

**REPLY COMMENTS OF AMERICAN TELECASTING, INC.**

American Telecasting, Inc. ("ATI"), by its counsel, hereby submits reply comments in response to the Notice of Proposed Rulemaking herein.<sup>1</sup>

**I. INTRODUCTION**

The Commission received more than sixty sets of comments in response to the NPRM proposing an array of diverse uses for the frequency spectrum being transferred from Federal Government to private use. The Commission's task can be seen as a difficult one as it attempts to balance the needs of would be users of this spectrum along with the interests of affected incumbent users. However, ATI believes the Commission has correctly identified the goals it will attempt to achieve in the final allocation decision: promotion of competition and emerging technologies,<sup>2</sup> and that the Commission can simplify its task by focusing on

<sup>1</sup> Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, FCC 94-272, Notice of Proposed Rulemaking, ET Docket No. 94-32 (rel. Nov. 8, 1994) (the "NPRM").

<sup>2</sup> Thus, the Commission indicated that the transferred spectrum "has the potential to provide for the continued growth and development of advanced communications and technologies, thereby creating new high technology jobs and economic growth. . . . [W]e believe all of the spectrum can be used to promote advanced technologies and provide economic growth." NPRM, ¶ 4. Similarly, the Commission concluded that it was "important to provide for a market structure that provides for competition in the provision of new services" as a means of incenting operators "to develop and introduce innovative service features and technologies." NPRM, ¶ 9.

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these goals. Moreover, ATI strongly believes that the allocation proposal described in its initial comments herein -- assignment of the 4660-4685 MHz band for use as a return channel for interactive wireless cable service -- is uniquely suited to the Commission's stated objectives.

**II. ATI'S PROPOSAL WILL SERVE THE FCC'S OBJECTIVES BY IMPLEMENTING IMMEDIATE USE OF THE TRANSFERRED SPECTRUM BY AN EMERGING TECHNOLOGY, AND BY FOSTERING COMPETITION AND ECONOMIC GROWTH**

The Commission has repeatedly acknowledged the importance of implementing regulatory policies that will foster development of the National Information Infrastructure ("NII"), facilitating economic growth and the creation of jobs. For example, the Commission has concluded that price cap regulation of local exchange telephone companies, by replicating many of the effects of competition, would encourage the phone companies to modernize their networks, deploy new technologies, and offer new services and, in the bargain, promote economic growth and stimulate "an even healthier, more vital sector of the U.S. economy[.]"<sup>3</sup> Currently, in its price cap review proceeding (CC Docket No. 94-1), the Commission seeks to determine "whether the current LEC price cap plan facilitates economic growth and the creation of jobs for American workers", and "whether and how the LEC price cap plan should be revised to help development of a ubiquitous, national information infrastructure."<sup>4</sup> Similar competitive broadband infrastructure objectives are reflected in the

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<sup>3</sup> Policy and Rules Concerning Rates for Dominant Carriers, CC Docket No. 87-313, 5 FCC Rcd 6786, 6790-91 (1990).

<sup>4</sup> In the Matter of Price Cap Performance Review of Local Exchange Carriers, Notice of Proposed Rulemaking, CC Docket No. 94-1, FCC 94-10, rel. February 16, 1994, ¶¶ 33, 36.

Commission's policies implementing video dialtone offerings by telephone companies.<sup>5</sup>

The transfer of spectrum below 5 GHz from Government use provides a further opportunity to achieve these goals. While the Commission is well advised to pursue policies that will foster competition between telephone companies and cable systems in the development of ubiquitous broadband infrastructures, it cannot be doubted that introduction of additional "pipelines" will as well or better serve the Commission's objectives.<sup>6</sup> Assignment of the 4660-4685 MHz band for use as a wireless cable return channel would permit the nation's wireless cable providers to offer their subscribers interactive service, implementing an additional and immediately effective technology "link" in the NII.

As shown in ATI's initial comments,<sup>7</sup> assignment of part of the transferred spectrum for use as a wireless cable return link fits the model outlined by the NPRM, which:

- targets the newly available bands for "new and developing services";<sup>8</sup>
- prefers a "flexible use of these bands so that licensees would be able to offer a wide range of services employing varying technologies";<sup>9</sup>

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<sup>5</sup> See, In the Matter of TELEPHONE COMPANY - CABLE TELEVISION Cross-Ownership Rules, Sections 63.54 - 63.58 (Second Report and Order, Recommendation To Congress, And Second Further Notice of Proposed Rulemaking), 7 FCC Rcd 5781 (1992).

<sup>6</sup> As noted by the Commission: "[I]t is important to provide a market structure that provides for competition in the provision of new services. A competitive market structure would promote economical prices for users and provide operators with incentives to develop and introduce service features and technologies." NPRM, ¶ 9.

<sup>7</sup> ATI Comments, p. 4.

<sup>8</sup> NPRM, ¶ 8.

<sup>9</sup> Id.

- proposes "technical flexibility" which would allow "users freedom to choose the channelization, signal strength, modulation techniques and antenna characteristics they employ in providing service";<sup>10</sup>
- suggests an "exclusive use of these channels within a specified geographic area" and proposes "service area boundaries".<sup>11</sup>

### **III. OTHER PROPOSALS FOR USE OF THE TRANSFERRED SPECTRUM FAIL TO MEET THE COMMISSION'S OBJECTIVES**

While the Commission has been presented with a number of alternative suggestions for use of the transferred spectrum, they generally fall short of meeting the Commission's stated objective to promote emerging technologies, developing services and competition. It should go without saying that allegations of need for additional frequency spectrum alone should not be sufficient to warrant a transfer of spectrum in this proceeding. General spectrum shortage problems, such as are raised in the comments filed by the television broadcasters and public safety entities, are essentially indistinguishable and do not uniquely qualify any of these entities to be assigned transferred frequency spectrum. Many Commission licensees, including wireless cable operators, suffer similar, if not worse, spectrum shortage problems. As noted in the comments filed by The Wireless Cable Association International, Inc., the Commission has recognized that "wireless cable operators face a severe shortage of channel capacity when compared to their coaxial cable

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<sup>10</sup> Id. at ¶ 10.

<sup>11</sup> Id. at ¶ 9-10. As pointed out in ATI's initial comments (ATI Comments, p. 3), to compete effectively by providing service to customers when ordered, wireless cable operators must not be required to license each return path separately, but must have access to frequency blocks they can use within a defined geographic service area, much like cellular.

and Direct Broadcast Satellite ("DBS") competition."<sup>12</sup> Virtually everyone could use additional frequency spectrum.

Therefore, while a need for spectrum should be a threshold requirement, the focus should remain on new services, emerging technologies and competition. At the same time, however, the Commission should focus on presently developed technologies. ATI agrees with the comments filed by Wireless Holdings, Inc. in this regard:

As the Commission shows in the Notice at Appendix A, this transfer of spectrum is the first of many such transfers to be mandated by law in the coming years. Some of the uses previously suggested by commenters involve services or technologies which are still substantially under technical development and are not presently available for use. The later transfers of spectrum can accommodate many of these uses without delaying their availability to the public."<sup>13</sup>

None of the uses proposed by other commenters in this proceeding meets these overall objectives as well as the return channel use proposed by wireless cable.<sup>14</sup>

**A. Proposed Broadcast Auxiliary Use Of The 4660-4685 MHz Band Would Not Serve Competitive Objectives And Would Be Premature At Best**

Television broadcasters have requested that the 4660-4685 MHz spectrum be "reserved" for wideband advanced digital video

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<sup>12</sup> Comments of The Wireless Cable Association International, Inc., pp. 1-2, citing, Amendment of Part 74 of the Commission's Rules Governing Use of the Frequencies in the Instructional Television Fixed Service, 9 FCC Rcd 3360, 3364 (1994); Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service, FCC 94-293, MM Docket No. 94-131 and PP Docket No. 93-523, at ¶ 2 (rel. Dec. 1, 1994).

<sup>13</sup> Wireless Holdings, Inc. Comments, p. 4.

<sup>14</sup> The transferred spectrum is, of course, sufficient to serve the needs of more than one service. For example, both the telephone companies' wireless local loop and the In-Flight AAVS proposals would use the 2390-2400 MHz band and would not conflict with wireless cable's use of the 4660-4685 MHz band. Similarly, the interests of existing Amateur, Part 15 and ISM users likewise would be unaffected by allocation of the 4660-4685 MHz band to wireless cable.

(ATV auxiliary broadcast) services and allocated to terrestrial fixed and mobile broadcast operations, citing congestion in the existing auxiliary broadcast bands.<sup>15</sup> They also suggest that it might be possible to use this frequency band for both existing analog NTSC and digital ATV auxiliary operations.<sup>16</sup>

The Joint Television Commenters acknowledge that the proposed reservation of these frequencies for auxiliary broadcast use would be contrary to Congressional and FCC expressed preferences for auction of transferred spectrum to competitive service providers, but argue in part that no proposals have been presented for use of the 4660-4685 MHz band for subscriber services.<sup>17</sup> They also contend that there have been few proposals for use of the 4660-4685 MHz band in general (microwave fixed links, MSS feeder links, land mobile communications and certain electronic devices), and assert that "none of these commenters made a serious effort to demonstrate the technical feasibility of their proposals, nor did they establish a pressing need for the 4660-4685 MHz band."<sup>18</sup>

ATI and others have now proposed a technically feasible use of the 4660-4685 MHz band for subscriber services, and have shown a pressing need for these frequencies to provide competitive interactive services through an emerging technology -- wireless cable. In contrast, the Joint Television Commenters would use

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<sup>15</sup> Joint Comments of the Association For Maximum Service Television, Inc. and Other Major Television Broadcaster Entities ("Joint Television Comments"), p. 2.

<sup>16</sup> Joint Television Comments, p. 14.

<sup>17</sup> Joint Television Comments, p. 10.

<sup>18</sup> Joint Television Comments, p. 5.

these frequencies for electronic news gathering, a non-subscriber, non-competitive, non-emerging technology. There is no legitimate basis for "reserving" the band for future use by broadcasters.

Apart from the fact that an important underlying premise of the broadcasters' argument in favor of a non-subscriber service allocation of the 4660-4685 MHz band is no longer true, the reservation of this initial allocation of transferred Government spectrum to ATV auxiliary broadcast use would be premature in light of the fact that the future of ATV broadcasting is uncertain. As the Joint Television Commenters admit, "[a] transmission standard has not yet been adopted, and equipment manufacturers are not yet producing hardware to support ATV broadcast auxiliary operations."<sup>19</sup> Apparently, it is the Joint Television Commenters hope that the Commission will assign them this spectrum for interim use for analog auxiliary broadcast service pending adoption of an ATV transmission standard and production of ATV hardware. However, use of this band for analog auxiliary broadcast purposes clearly would not serve the Commission's "new service" and "emerging technology" objectives for employment of the transferred spectrum.

Broadcasters should look to future rounds of frequency transfers for ATV auxiliary broadcast purposes at such time, if any, as digital ATV is implemented. Frequencies currently being considered should be used for existing applications. Indeed, the Joint Television Commenters already look forward to the January

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<sup>19</sup> Joint Television Comments, p. 14.

1997 transfer of the contiguous 4635-4660 MHz band which they might use "assuming that a need for additional spectrum exists in 1997", arguing that assignment of the 4660-4685 MHz spectrum now being transferred "would serve as a powerful incentive for the design, manufacture, and purchase of cost effective digital equipment that would operate on these frequencies."<sup>20</sup> The Joint Television Commenters would put the cart before the horse, asking for frequencies now as an incentive to develop a new, presently unavailable service.

**B. Proposed Public Safety Uses Would Not Advance The Commission's Goals Of Promoting Competition And Emerging Technologies Through The Spectrum Transfer**

Public safety commenters argue that they need additional frequency spectrum to address existing frequency congestion problems and to meet future needs. While these contentions may have some merit, they ignore the principal objectives of the spectrum transfer being considered in this proceeding. Speaking for public safety users, The Association of Public-Safety Communications Officials-International, Inc. ("APCO"), argues that it is not enough for the Commission to pledge that it will "continue to consider COPE's request for spectrum."<sup>21</sup> However, ATI submits that the Commission is properly focusing in this first wave of frequency transfers on providing frequencies for emerging technologies which, APCO's concerns for adequate public safety spectrum notwithstanding, is the principal focus of the

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<sup>20</sup> Joint Television Comments, pp. 8-9.

<sup>21</sup> APCO Comments, p. 8.



Omnibus Budget Reconciliation Act. Additional public safety spectrum may be considered in subsequent frequency transfers.

Further, the Commission correctly concluded that private users can receive adequate service from commercial service providers.<sup>22</sup> Public safety groups have not shown why they may not rely on service from commercial service providers. APCO expresses concern with the need for "universal coverage" throughout the relevant areas within the jurisdiction of public safety areas, noting that a "sheriff's department cannot risk losing communication with a deputy who happens to be driving through a valley or behind a large building."<sup>23</sup> APCO is further concerned that commercial operators will not "provide the extra interference protection that public safety agencies must build into their systems to prevent vital communications from being disrupted by co-channel or adjacent channel operations."<sup>24</sup>

ATI submits that these concerns will be addressed by competition, and that Commission policies fostering competition are, therefore, the best way to ensure reliability and quality of commercial services. Cellular systems, already generally reliable and providing high-quality service as a result of competition from cellular and SMR service competitors, will soon be competing with PCS providers. Inevitably, competition between an increasing number of commercial providers of mobile services must result in the "universal coverage" and "interference protection" features vital to public safety agencies because

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<sup>22</sup> NPRM, ¶ 16.

<sup>23</sup> APCO Comments, p. 8.

<sup>24</sup> Id.

service quality, along with price, can be expected to be a major competitive factor. Commercial services suffering from coverage or interference problems will not survive. The future points toward a decreasing need for frequency allocations devoted exclusively to private use.


#### **IV. CONCLUSION**

The Commission should allocate the 4660-4685 MHz band for use as a return link for wireless cable for the reasons stated herein and in our initial comments.

Respectfully submitted,

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January 6, 1995

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